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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/654,888	09/05/2003	Takayuki Araki	Q77315	6640

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EXAMINER
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HU, HENRY S

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/654,888

Applicant(s)

ARAKI ET AL.

Examiner

Henry S. Hu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on IDS of 5-24-2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-28 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                              |                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4 pages</u> . | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

1. It is noted that Applicants' **four** IDS' filed up to May 24, 2004 were received respectively. It is also noted that Applicants' priority paper filed on December 29, 2003 was received. **Claims 1-28 are now pending** with a total of **two independent claims** (Claims 1 and 16). An action follows.

### *Election/Restrictions*

2. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1, this is based on the preliminary search done by the examiner.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

I. **Claims 1-18, drawn to a fluorinated resin composition** comprising (I) a fluoropolymer having a functional group, and (II) a rare earth metal ion; said fluoropolymer (I) has a structural unit from  $CX^1X^2=CX^3-(CX^4X^5)_a-(C=O)_b-(O)_c-Rf$  wherein the factors of  $X^1$  and  $X^2$  can be the same or different from H or F;  $X^3$  is H, F,  $CH_3$  or  $CF_3$ ;  $X^4$  and  $X^5$  can be the same

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or different from H, F or CF<sub>3</sub>; Rf can be carbonyl-containing alkylene or alkylene ether; and a is integer of 0-3, while b and c can be 0 or 1, (it is noted that independent Claim 16 is structurally related to Claim 7 in view of Rf group in formula 2), classified in class 526, subclass 245.

II. Claims 19-28, drawn to an optical amplifying device or a light emitting device made of the fluorinated resin composition of Group I, classified in class 436, subclass 73.

3. In the case either Group I or Group II is elected, the Applicants need to further elect one of the following eight different species where Claims 1 and 5-18 are generic:

Species (1): a = 0; b = 0, c = 0 (Claim 2)

Species (2): a = 0; b = 0, c = 1 (Claims 2 and 4)

Species (3): a = 0; b = 1, c = 0

Species (4): a = 0; b = 1, c = 1

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Species (5): a = 1-3; b = 0, c = 0 (Claim 2)

Species (6): a = 1-3; b = 0, c = 1 (Claims 2 and 3)

Species (7): a = 1-3; b = 1, c = 0

Species (8): a = 1-3; b = 1, c = 1

4. The inventions are distinct, each from the others because of the following reasons:

**All invention groups are unrelated each other.** Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different same functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, Group I is related to **a fluorinated resin composition** comprising (I) a fluoropolymer having a functional group, and (II) a rare earth metal ion, while Group II is related to **an optical amplifying device or a light emitting device**. Additionally, monomers from species 1-8 are structurally quite different in view of ethylenic moiety (X 1-3) and pendant group (Rf, a, b and c).

5. In a very close examination, species 1-8 are related to monomers of **fluorinated ethylenic monomers having functional group but with different combination on a, b and c**. **They are “sixteen” (not two) different inventions** since all the eight species in Groups 1 and II are different monomers in view of the factors on “a, b, c” and “X”. **Therefore, in the case of electing Group I or Group II with species election, the Applicants are advised to regroup the related claims.** Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

6. Where the group of inventions is claimed in one and the same international application, the requirement for unity of invention referred to in Rule 13.1 shall be fulfilled only when there

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is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression “**special technical features**” shall mean those technical features that define a contribution which each of the claimed inventions considered as a whole, **makes over the prior art**. The inventions listed as Groups I to VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, although they share the special technical feature, this special technical feature does not define a contribution over the prior art for the following reasons:

7. Claims 1-18 as well as Claims 19-28 are either obvious or anticipated by any one of the following US 6,306,975 B1 to Zhao et al., US 5,581,398 to van Veggel et al., JP 2000/63682 A to Hasegawa et al. and JP 05/88026 A to Imamura et al., each individually or in combination. With respect to the eight species, **it should be noted that it might take totally different synthetic method to synthesize such a claimed monomer and/or polymer even the difference is only on a small substituent**. In summary, these types of monomers have no common features in the preparation as well as its application since they are structurally different. The scope of the claims, i.e., the metes and boundaries are distinct. Accordingly, the special technical feature linking the inventions, making monomers/copolymers and/or device comprising cure site-containing monomers from Groups I and II does not provide a contribution over the prior art, and no single general inventive concept exists. Therefore the restriction is appropriate.
8. Because these inventions are distinct for the reasons given above shown as different subject matters and the search required for each group is not required for other groups have

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acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is required under 35 U.S.C. 121 **to elect a single disclosed species for prosecution of either Group I or Group II** on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, **Claims 1 and 5-18 are generic.**

9. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the

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examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

10. It is noted that no phone call was made to **Abraham J. Rosner (tel: 202 293-7060)** by the examiner due to the complexity in this particular case. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

11. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143). Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Dr. Henry S. Hu whose telephone number is **(571) 272-1103**. The examiner can be reached on Monday through Friday from 9:00 AM –5:00 PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300 for all regular communications. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Henry S. Hu

Patent Examiner, art unit 1713, USPTO

September 27, 2005



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